Pension insurance reform, factor income distribution and savings rate: an experience from China

Topic: Price and Income Policies
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Abstract: Background: The downward pressure on todayâ€™s world economy is huge. Expanding domestic demand, boosting consumption and promoting rational savings are of great significance to driving economic recovery. Since the 1970s, China's national savings rate has been among the top in the world. The imperfect social pension security system and unequal distribution of factor income are considered to be closely related to China's high savings rate (Meng L G, 2019; Wang H J and Chen X K, 2011). According to some studies, the pension security system has a "crowding out" effect on the savings rate (Yang L X, 2020) and also has an income redistribution effect (Sosa, 2021). Guo(2011) discussed the impact of taxation as a means of income redistribution on the structure of factor income distribution and believed that different types of taxation separately affected the factor income of labor and capital. However, few researches have studied the impact of perfecting the pension insurance system on the resident savings rate from the perspective of improving the inequality of factor income distribution.
In 2009, China experimented with the "New Rural Social Endowment Insurance" in 22 provinces, covering 10% of the counties and cities, which changed the pension insurance paid by individual farmers to the pension insurance jointly paid by individuals, collectives and governments.

Question: Based on the quasi-natural experiment of " New Rural Social Endowment Insurance " pilot, this paper explores how the improvement of social pension security system affects the macro savings rate. Does it change the distribution structure of factor income? Does factor income distribution affect saving rate? What is the mechanism? Is there heterogeneity in different regions?

Methods: Data of input-output tables from 2007-2012 of 31 provinces in China are used to calculate the savings rate, labor factor income distribution and rural income distribution of the provinces before and after the " New Rural Social Endowment Insurance" pilot. Since the " New Rural Social Endowment Insurance" involves 22 provinces, it is difficult to match the experimental group and control group with traditional DID model. Therefore, the proportion of pilot counties and cities in each province is adopted as the policy variable, and the continuous multiple-difference model is used to explore the impact of the improvement of social pension insurance system on the macro savings rate and its mechanism.

Conclusion: The results show that (1) the implementation of New Rural Social Endowment Insurance significantly reduces the macro savings rate. (2) In terms of mechanism, New Rural Social Endowment Insurance affects the savings rate by increasing the channels of rural income distribution and labor factor income distribution. (3) Further analysis shows that the effect of New Rural Social Endowment Insurance on saving behavior is weaker in more economically developed areas and stronger in areas with lower fertility rate.

Novelty: (1) Most of the existing studies have used micro household data to measure the impact of pension insurance on savings rate, but this paper provides macro-level evidence. (2) Innovatively explore the mechanism of pension security system's impact on savings rate from the perspective of factor income distribution. (3) Using the ratio of counties and cities as the degree of policy impact, a continuous multiple-difference model is constructed.

Key words: endowment insurance; input-output analysis; factor income distribution; saving rate;